

Appln No. 10/760,251
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Response to Office Action of December 5, 2005

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Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently amended) A printer assembly for producing rolls of wallpaper, said assembly comprising:

(a) a printer comprising:

a frame in which is located a media path which extends from a media loading area to a winding area;

a printhead located across the media path;

one or more input devices for capturing operator instructions; and

a processor which accepts operator inputs which are used to configure the printer for producing a

particular roll,

wherein the winding area is adapted to removably retain a consumer tote for a roll of wallpaper; and

(b) a consumer tote retained in said winding area, the tote comprising:

a disposable container in which is formed a main access flap and a pair of core access openings; and

a disposable core located within the container and aligned with the access openings, such that wallpaper

produced by the printer is wound onto the core and packaged in said container.

2. (Currently amended) The printer assembly of claim 1, further comprising:

an internal dryer, the dryer located between the printhead and the winding area and adapted to blow air onto a printed media web.

3. (Currently amended) The printer assembly of claim 1, further comprising:

a cutting mechanism located between the printhead and the winding area and adapted to divide a media web from a wound portion.

4. (Currently amended) The printer assembly of claim 1, further comprising:

a slitting mechanism located between the printhead and the winding area and adapted to longitudinally slit a media web prior to winding.

5. (Currently amended) The printer assembly of claim 1, further comprising:

a bar code scanner which communicates with the processor and through which data is input.

6. (Currently amended) The printer assembly of claim 1, further comprising:

a well, external to the cabinet and adjacent to an exit slot;

the well having at each end, spindles for aligning, retaining and removing a core, and for rotating the core.

7. (Currently amended) The printer assembly of claim 1, further comprising:

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on a front exterior surface of the cabinet, a tilting video display for displaying information about wallpaper that the printer may print.

8. (Currently amended) The printer assembly of claim 7, wherein:
the video display is a touchscreen which can receive operator selections for use by the processor.
9. (Currently amended) The printer assembly of claim 1, wherein:
the loading area further comprises a location for a media cartridge, in which a media cartridge dispensing slot is adjacent to the path.
10. (Currently amended) The printer assembly of claim 9, wherein:
the media cartridge loading area further comprises one or more locations where a media cartridge can be stored.
11. (Currently amended) The printer assembly of claim 1, wherein:
the printhead is mounted on a rail, the printhead being able to slide along the rail into and out of a printing position across the path.
12. (Currently amended) The printer assembly of claim 11, wherein:
the printhead is a multi-color printhead which is supplied by separate ink reservoirs, the reservoirs connected to the printhead by a number of ink supply tubes, there being a tube disconnect coupling between the reservoirs and the printhead.
13. (Currently amended) The printer assembly of claim 11, further comprising:
an air supply and a tube for bringing a supply of air to the printhead which supply prevents media from contacting the printhead.
14. (Currently amended) The printer assembly of claim 11, further comprising:
a capper motor, the capper motor driving a capping and blotting device;
the capping device sealing the printhead when not in use in order to prevent contamination from entering the printheads.
15. (Currently amended) The printer assembly of claim 14, wherein:
the capping and blotting device further comprises a blotter, which moves into and out of position and which is used for absorbing ink fired from the printheads.
16. (Currently amended) The printer assembly of claim 11, further comprising:
one or more rail microadjusters for accurately adjusting a gap between the printhead and the media onto which it is printing.
17. (Currently amended) The printer assembly of claim 1, wherein:
the path comprises a generally straight path which is self threading.

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18. (Currently amended) The printer assembly of claim 1, further comprising:
a pre-heater platen located before the printhead.
19. (Currently amended) The printer assembly of claim 2, further comprising:
a door which covers an opening into a lower compartment of the dryer;
the door being moveable from a closed position which covers the opening, to an open position in which the media passes through the opening into the lower compartment and out of the compartment, also through the opening.
20. (Currently amended) The printer assembly of claim 4, wherein:
the slitting mechanism further comprises a pair of rotating brackets between which extend a number of transverse shafts, each shaft having one or more cutters, the end brackets rotatable to allow for the selection of any or none of the shafts for cutting the media web.
21. (Currently amended) A printer assembly as claimed in claim 1 wherein the media is printed by the printhead at a rate exceeding 0.02 square meters per second (775 square feet per hour).
22. (Currently amended) A printer assembly as claimed in claim 1 wherein the media is printed by the printhead at a rate exceeding 0.1 square meters per second (3875 square feet per hour).
23. (Currently amended) A printer assembly as claimed in claim 1 wherein the media is printed by the printhead at a rate exceeding 0.2 square meters per second (7750 square feet per hour).
24. (Currently amended) A printer assembly as claimed in claim 1 wherein the printhead has more than 7680 nozzles.
25. (Currently amended) A printer as assembly claimed in claim 1 wherein the printhead has more than 20,000 nozzles.
26. (Currently amended) A printer assembly as claimed in claim 1 wherein the printhead has more than 100,000 nozzles.
27. (Currently amended) A printer assembly as claimed in claim 1 wherein the printhead has more than 250,000 nozzles.
28. (Currently amended) A printer assembly as claimed in claim 1 wherein the printhead prints ink drops with a volume of less than 5 picoliters.
29. (Currently amended) A printer assembly as claimed in claim 1 wherein the printhead prints ink drops with a volume of less than 3 picoliters.
30. (Currently amended) A printer assembly as claimed in claim 1 wherein the printhead prints ink drops with a volume of less than 1.5 picoliters.
31. (Currently amended) A printer assembly as claimed in claim 1 wherein it is self contained and comprises:

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a cabinet in which is located a media path which extends from a media cartridge loading area to a winding area;
a full width digital color printhead located in the media path;
a processor which accepts operator inputs which are used to configure the printer for producing a particular roll;
and
the winding area adapted to removably retain a core and wind onto the core wallpaper produced by the printer.

32. (Currently amended) A printer assembly as claimed in claim 1 adapted for use with a media cartridge, the media cartridge comprising:

a case adapted to receive a roll of blank media;
the case having two halves, hinged together, an area between the two halves, when closed, defining a media supply slot; and
the case having internally and adjacent to the slot, a pair of rollers, at least one of the rollers being a driven roller which is supported at each end, by the case, for rotation by an external motor.

33. (Cancelled)

34. (Currently amended) A printer assembly as claimed in claim 1 including a transverse cutter, the transverse cutter comprising:

a chassis having end plates;
the end plates being separated to allow a web of media to pass between them;
the end plates supporting between them a cutting blade; and
the blade supported at each end to perform a cutting motion which begins on one side of the web and finishes on an opposite side of the web.

35. (Currently amended) A printer assembly as claimed in claim 1 including a slitting mechanism, the slitting mechanism comprising:

a chassis having end plates;
the end plates being separated by a transverse portion of the chassis to allow a web of media to pass between them;
one or more rotating slitting shafts extending between the end plates, each shaft having one or more slitters arranged along its length, each slitter having a cutting edge; and
the slitting mechanism selectively engageable to either enter or not enter a path followed by the web according to an input provided by an operator of the printer.

36. (Currently amended) A printer assembly as claimed in claim 1 including a dryer for a printer such as a wallpaper printer, the dryer comprising:

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a compartment with a top opening for receiving a media web fed from the printer;
a source of heated air located above the top opening for blowing heated air into the opening to dry printing on the media web.

37. (Currently amended) A printer assembly as claimed in claim 1 further comprising:
a cabinet in which is located a media path which extends from a media loading area to a winding area;
a printhead located in the media path;
a processor which accepts operator inputs from one or more input devices which are used to configure the printer for producing a particular roll; and
the winding area adapted to removably retain a core and wind onto it, wallpaper produced by the printer wherein, the length and design of the roll are determined by the operator inputs.

38. (Currently amended) A method of printing wallpaper onto a web of media, the method using a printer assembly as claimed in claim 1, the method comprising the steps of:
utilizing an on-demand printer comprising a cabinet in which is located a media path which extends from a media loading area to a winding area, there being a printhead located in the media path, a processor which accepts operator inputs from one or more input devices;
using one or more input devices which communicate with the processor to capture data from an operator regarding a specification for an operator's requirements;
using the processor to operatively control the printer according to the data; and
printing a single roll of wallpaper, on demand, according to a selected pattern.

39. (Currently amended) A method for operating a wallpaper printing business, the method using a printer assembly as claimed in claim 1, the method comprising the steps of:
utilizing an on-demand printer comprising a cabinet in which is located a media path which extends from a media loading area to a printhead and from the printhead to a dispensing slot;
using one or more printer input devices which communicate with a processor to capture data regarding one or more customer's requirements;
the data comprising at least a customer selected pattern;
printing a roll of wallpaper, onto a web of blank media, on demand, according to the selected pattern; and
charging a customer for the roll.

40. (Currently amended) A method for operating a wallpaper printing franchise, the method using a printer assembly as claimed in claim 1, the method comprising the steps of:

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providing to franchisees, an on-demand printer comprising a cabinet in which is located a media path which extends from a media loading area to a printhead and from the printhead to a dispensing slot;
the printer having one or more printer input devices which communicate with a processor to capture data regarding one or more customer requirements, the data comprising at least a customer selected pattern;
providing the franchisee with a collection of patterns in a digital storage medium that can be read by the printer;
enabling the franchisee to print a roll of wallpaper, onto a web of blank media, on demand, according to the selected pattern; and
obtaining or attempting to obtain a fee from the franchisee.

41. (Currently amended) A method for printing wallpaper onto a web of media, the method using a printer

assembly as claimed in claim 1, the method comprising the steps of:

utilizing an on-demand printer comprising a cabinet in which is located a media path, there being a full width printhead located across the media path, there being a processor which accepts operator inputs from one or more input devices and which controls the printer;
using one or more input devices which communicate with the processor to capture data from an operator regarding a specification;
running the printer according to the data;
printing a single roll of wallpaper, on demand, according to a selected pattern and configuration;
changing the pattern according to a new datum from an operator; and
then printing a new roll onto the same web.

42. (Currently amended) A method for drying a moving web of media in a printer assembly as claimed in claim 1, the method comprising the steps of:

loading the web in a path that traverses a compartment in a dryer within the printer, the compartment having an opening across the top;
allowing the moving web to descend into the compartment, as required; and
blowing heated air from above the opening.

43. (Currently amended) A printer assembly as claimed in claim 1 for use in a method of supplying a media

web to a wallpaper printer, comprising the steps of:

opening a reusable case;
placing into the case a core onto which has been located a supply roll of blank wallpaper media;
supporting the core for rotation within the case;
leading a free edge of the roll between a pair of rollers and past an edge of the open case; then

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with the rollers located within the case and on either side of the web, closing the case and loading it into a printer.

44. (Currently amended) A printer assembly as claimed in claim 1 further comprising a printhead assembly which prints onto a moving web that follows a path, the assembly comprising:

a full width printhead located across the path;

the printhead comprising a color printhead which is at least as wide as the web;

the printhead being supplied with a number of different inks which are remote from the printhead and which supply the printhead through tubes.

45. (Currently amended) A printer assembly as claimed in claim 1 further comprising:

a housing in which is located a media path which extends from a blank media intake to a wallpaper exit slot;

a multi-color roll width removable printhead located in the housing and across the media path;

the printhead being supplied by separate ink reservoirs, the reservoirs connected to the printhead by an ink supply harness, there being a disconnect coupling between the reservoirs and the printhead;

one or more input devices for capturing operator instructions;

a processor which accepts operator inputs which are used to configure the printer for producing a particular roll.

46. (Currently amended) A printer assembly as claimed in claim 1 adapted for use with a consumer tote for a roll of wallpaper, the tote comprising:

a disposable exterior in which is formed a main access flap and a pair of core access openings;

the tote having an interior in which is located a disposable core which is aligned with the access openings;

both openings exposing a moulded coupling, one coupling attached to each end of the core, at least one of the couplings being a driven coupling and adapted to engage a driving spindle that rotates the core.

47. (Currently amended) A printer assembly as claimed in claim 1 further comprising a removable printhead assembly which prints onto a moving web, the assembly comprising:

a full width stationary printhead located on a rail, the printhead being able to slide along the rail for service and removal;

a number of replaceable ink reservoirs which supply the printhead with different inks;

the printhead comprising a color printhead which is at least as wide as the web; and

the printhead being supplied with the different inks through tubes which can be disconnected so the printhead may be removed.

48. (Currently amended) A printer assembly as claimed in claim 1 wherein the printer is a self threading printer for producing rolls of wallpaper, comprising:

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a media loading area adapted to support a media cartridge in a position so that a media supply slot of the cartridge is closely adjacent to a pilot guide;

a cabinet housing a media path which extends from the pilot guide to a printed media dispensing slot;

a printhead located across the media path;

a processor which accepts operator inputs which are used to configure the printer for producing a particular roll;

a motor within the cabinet for advancing a media web out of the media cartridge; and

one or more other motors adapted to urge the media along the path and out of the slot.

49. (Currently amended) A method for producing wallpaper on-demand by using a printer assembly as claimed in claim 1, the method comprising the steps of:

utilizing an on-demand printer comprising a cabinet in which is located a media path which passes a printhead on the way to a dispensing slot;

selecting a pattern and a configuration;

using one or more printer input devices which communicate with a processor to input the pattern and the configuration; and

printing a roll of wallpaper, onto a web of blank media, on demand, according to the selected pattern and configuration.

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